

PATENT SPECIFICATION

DRAWINGS ATTACHED



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COMPLETE SPECIFICATION

Improvements relating to Cooking Ovens

We, CANNON INDUSTRIES LIMITED, a British Company, of Deepfields, Bilston, Staffordshire, and GERALD ARTHUR OATLEY, a British Subject of the Company's address, do hereby declare this invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

10 Shelves for use in cookers as supports for food, pans, plates and the like are usually removable and are arranged for insertion so that their side edges rest upon and are slideable along ribs suitably spaced across the oven side linings so that the shelves can be caused to slide into place from the front of the oven. The shelves are commonly in the form of a grid or mesh of wires or rods with a surrounding frame the side edges of which are adapted 20 for engaging the ribs on the oven sides.

The present invention consists in cooking oven shelf-supporting means comprising a pair of spaced parallel rail members at each side of the shelf, the longitudinal axis of each rail member lying in or parallel to the plane of the shelf, and the axes of both rail members of a pair also lying in a common plane substantially at right angles to the plane of the shelf, the space between the rail members being open-ended, and a series of parallel undulations or corrugations on the side members of the oven, the dimensions of the undulations or corrugations and the rail members being so related that the spaced rail members can slide along them either so as to embrace one of the projections or ribs, engaging its upper and lower walls, or so as to enter one of the depressions or valleys and engage the upper and lower walls thereof.

40 The spaced rail members of each pair are preferably asymmetrical with respect to the plane of the shelf. One rail member of each pair may conveniently be in the plane of the shelf and be formed by part of the periphery 45 of the shelf.

{Price 3s. 6d.}

The side members having the corrugations or undulations may be the inner side walls or linings of the oven or may be hinged or detachable shelf supporting members mounted at the sides of the oven.

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With this arrangement the position of the shelves can be varied to a greater degree than is the case when the shelves can only rest upon the ribs on the side members of the oven.

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The invention will now be described by way of example and with reference to the accompanying drawings, in which:

Figure 1 is a plan of an oven shelf.

Figure 2 is a side view of the oven shelf.

Figure 3 is a fragmentary front view of the oven shelf showing how it is supported in an oven.

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An oven shelf 5, such as the one shown in Figure 1 is the usual grid of wires or rods 6 with a surrounding frame 7. The frame of the oven shelf shown has part of its rear member 8 bent inwards to allow the shelf to fit round an obstruction in the rear of a particular type of oven. The side members of the frame form a rail member 9 at each side. Spaced from and parallel to each rail member 9 there is a second rail member 10, Figure 2 which may be arranged above or below the rail member 9 formed by a wire or rod of equal gauge to that of the frame. The rail members 9 and 10 are in the same plane substantially at right angles to the plane of the shelf. The ends of the second rail members 10 are cranked at 11 and secured, for example by welding to the front and rear members of the frame a short distance from the sides so as to provide an open-ended space 12, Figure 3 between the rails for avoiding obstruction when the shelf is to be slid into engagement with projections or ribs 13 on the oven side members 14.

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The side members or linings 14 of the oven are preferably pressed from sheet metal with a series of parallel undulations or corrugations extending substantially from front to back of

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the oven. The undulations of corrugations are so shaped and dimensioned that the spaced rail members 9 and 10 of the shelf can either slide in the depressions or valleys 15 or over the projections or ribs 13, and in each case both rail members will slidably engage a surface of the respective valley or rib, as shown in Figure 3. 35

Greater adjustability of the shelves of an oven is thus provided than has normally been possible except by withdrawing the shelf, turning it over and refitting it in an intermediate position. For this reason the invention is especially suitable for application to a shelf of asymmetrical shape or which for other reasons cannot conveniently be turned over. For example in the illustrated embodiment there is a rear guard rail 16 projecting above and at right angles to the plane of the shelf to prevent dishes or other articles supported by the shelf from going too far back. The present invention enables this guard rail to be above the shelf in any position of adjustment. 40

WHAT WE CLAIM IS:—

1. Cooking oven shelf-supporting means comprising a pair of spaced parallel rail members at each side of the shelf, the longitudinal axis of each rail member lying in or parallel to the plane of the shelf and the axes of both rail members of a pair also lying in a common plane substantially at right angles to the plane of the shelf, the space between the rail members being open-ended, and a series of parallel undulations or corrugations on the side mem- 45

bers of the oven, the dimensions of the undulations or corrugations and the rail members being so related that the spaced rail members can slide along them either so as to embrace one of the projections or ribs, engaging its upper and lower walls, or so as to enter one of the depressions or valleys and engage the upper and lower walls thereof. 50

2. Cooking oven shelf-supporting means according to Claim 1 wherein the spaced rail members of each pair are asymmetrical with respect to the plane of the shelf. 55

3. Cooking oven shelf-supporting means according to Claim 2 wherein one of the spaced rail members of each pair lies in the plane of the shelf and is formed by part of the periphery of the shelf. 60

4. Cooking oven shelf-supporting means according to any preceding claim wherein the shelf is a grid or mesh shelf made of wire or rod and the spaced rail members are made of similar material. 65

5. Cooking oven shelf-supporting means according to any preceding claim wherein the side members of the oven are made of sheet steel. 70

6. Cooking oven shelf-supporting means substantially as described herein with reference to and as illustrated by the accompanying drawings. 75

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PROVISIONAL SPECIFICATION

Improvements relating to Cooking Ovens

We, CANNON INDUSTRIES LIMITED, a British Company, of Deepfields, near Bilstion, Staffordshire, and GERALD ARTHUR OATLEY, a British Subject of the Company's address, do hereby declare this invention to be described in the following statement:— 95

Shelves for use in cookers as supports for food, pans, plates and the like are usually removable and are arranged for insertion so that their side edges rest upon and are slidable along ribs suitably spaced across the oven side linings so that the shelves can be caused to slide into place from the front of the oven. The shelves are commonly in the form of a grid or mesh of wires or rods with a surrounding frame the side edges of which are adapted for engaging the ribs on the oven sides. 100

The present invention consists in oven shelf supporting means comprising a pair of spaced parallel rail members at each side of the shelf, parallel to but asymmetrical with respect to the plane of the shelf and both lying in the same plane substantially at right angles to the plane of the shelf, the space between the rail members being open-ended, and a series of parallel undulations or corrugations on the side members of the oven which are so dimensioned 105

that the spaced rail members of the shelves can slide along them either so as to embrace one of the projections or ribs, engaging its upper and lower walls, or so as to enter one of the depressions or valleys and engage the upper and lower walls thereof. 110

The wall members having the corrugations or undulations may be the inner side walls or linings of the oven or may be hinged or detachable shelf supporting members mounted at the sides of the oven. 115

With this arrangement the position of the shelves can be varied to a greater degree than is the case when the shelves can only rest upon the ribs on the side members of the oven.

In an embodiment of the invention in which the shelf is the usual grid of wires or rods with a surrounding frame, the side members of the frame form one rail member at each side, and the second rail member at each side is formed by a wire, of equal gauge to that of the frame, arranged parallel to and spaced above or below the side member, the ends of this second wire being cranked and secured, for example by welding, to the front and rear members of the frame a short distance from the sides so as to provide an open-ended space between the rails

for avoiding obstruction when the shelf is to be slid into engagement with projections or ribs on the oven side members.

5 The side walls or linings of the oven are preferably pressed from sheet metal with a series of parallel undulations or corrugations extending substantially from front to back of the oven. The undulations or corrugations are so shaped and dimensioned that the spaced rail members of a shelf can either slide in the depressions or valleys or over the projections or ribs, and in each case both rail members will slidably engage a surface of the respective valley or rib.

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Greater adjustability of the shelves of an oven is thus provided than has normally been the case, and, moreover, the engagement of both rail members at each side of the shelf with surfaces of the side walls of the oven provides greater stability of the shelf, especially when it is drawn partly out of the oven for placing or removing dishes on or from it, or for inspecting food in the process of cooking.

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FIG. 1.

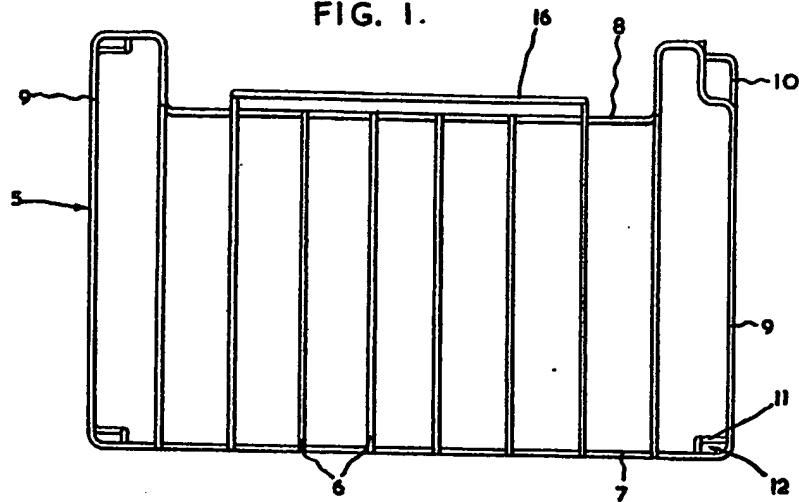


FIG. 2.

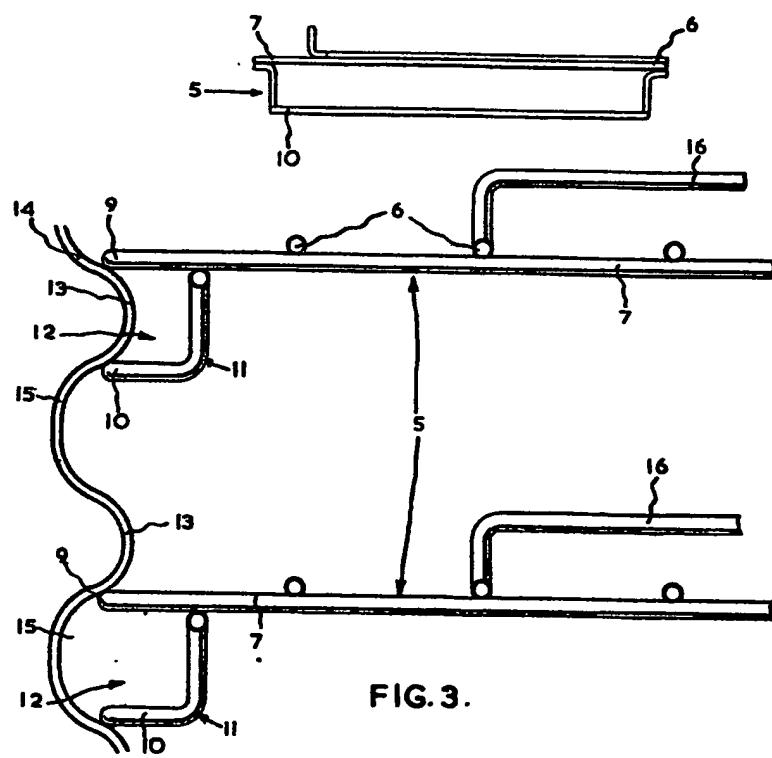


FIG. 3.